OIPE IAP55
NOV 02 2005
PATENT & TRADEMARK OFFICE

FIG. 1

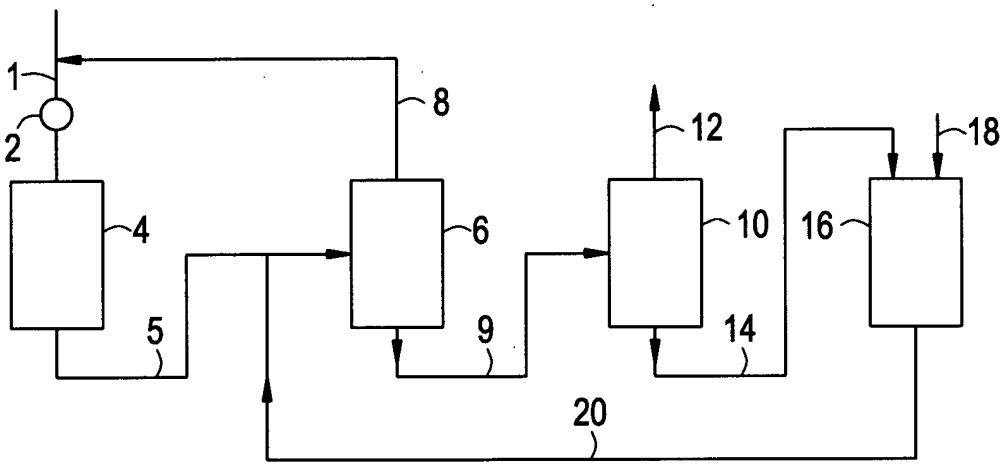


FIG. 2

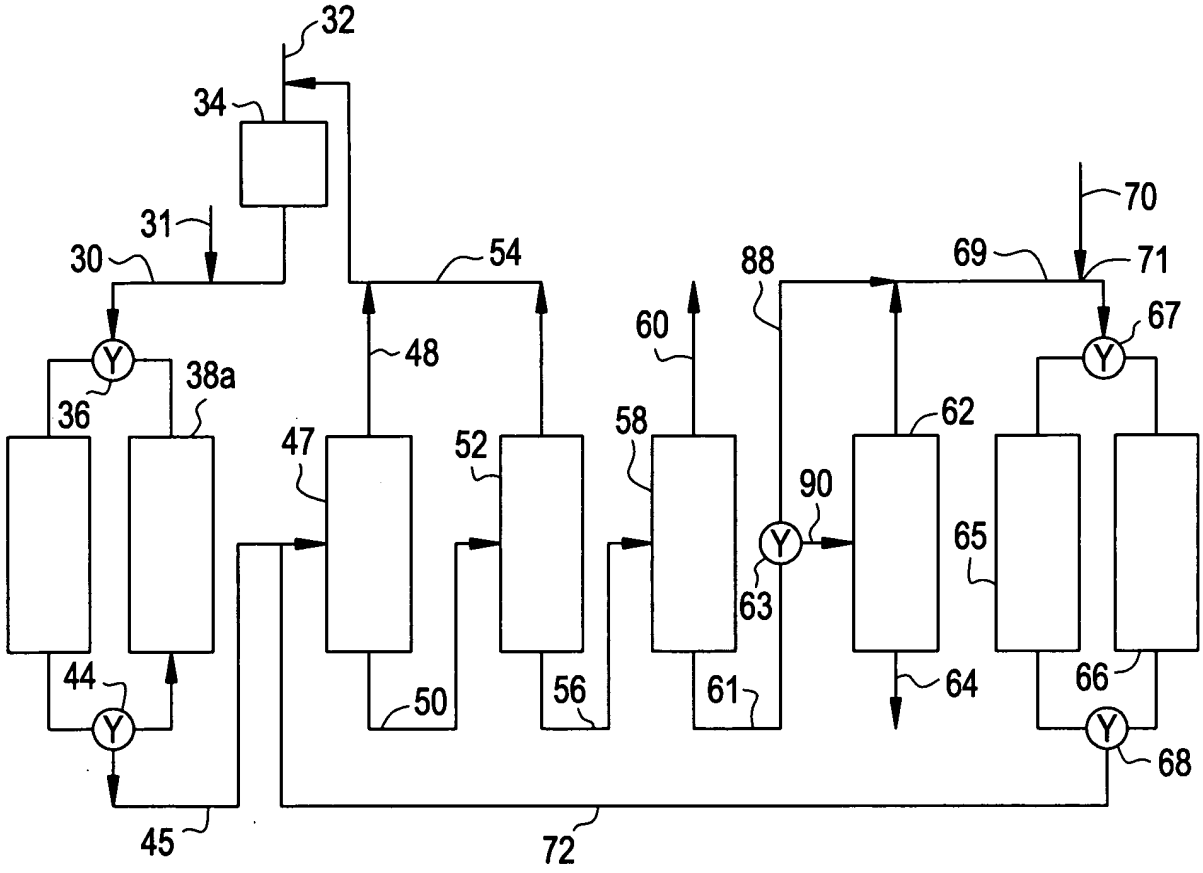

32
34
31
30
54
70
88
69
71
67
60
48
38a
36
62
58
47
52
90
65
63
44
50
56
61
64
66
68
45
72

FIG. 3

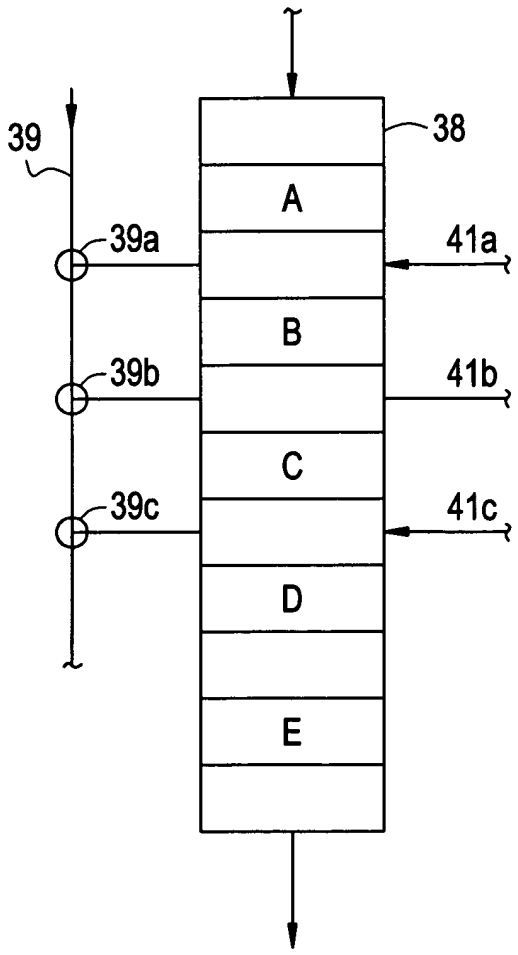


FIG. 4

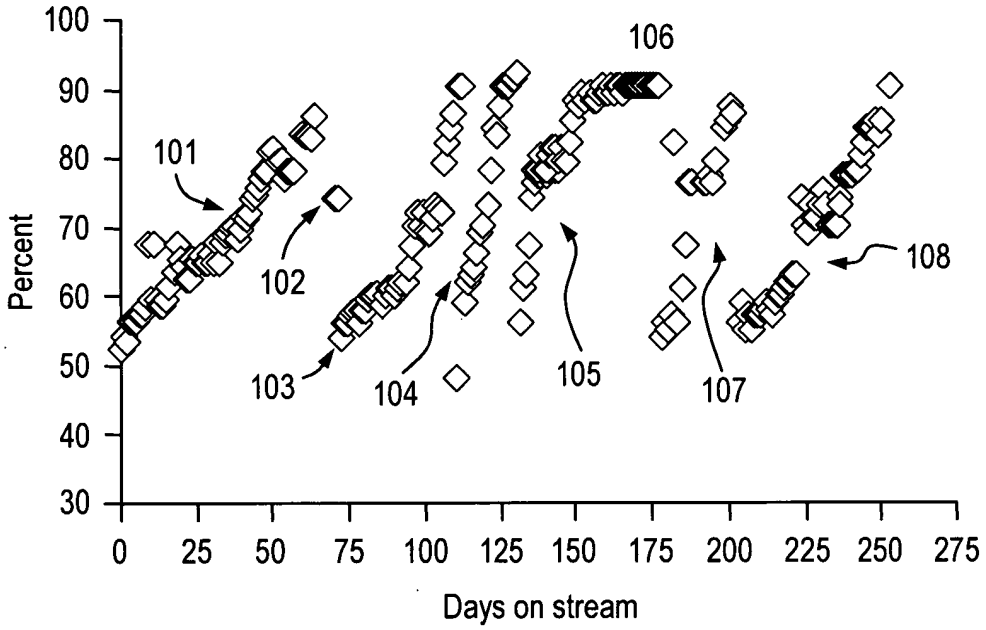

100
90
80
70
60
50
40
30
Percent
0
25
50
75
100
125
150
175
200
225
250
275
Days on stream
101
102
103
104
105
106
107
108

FIG. 5

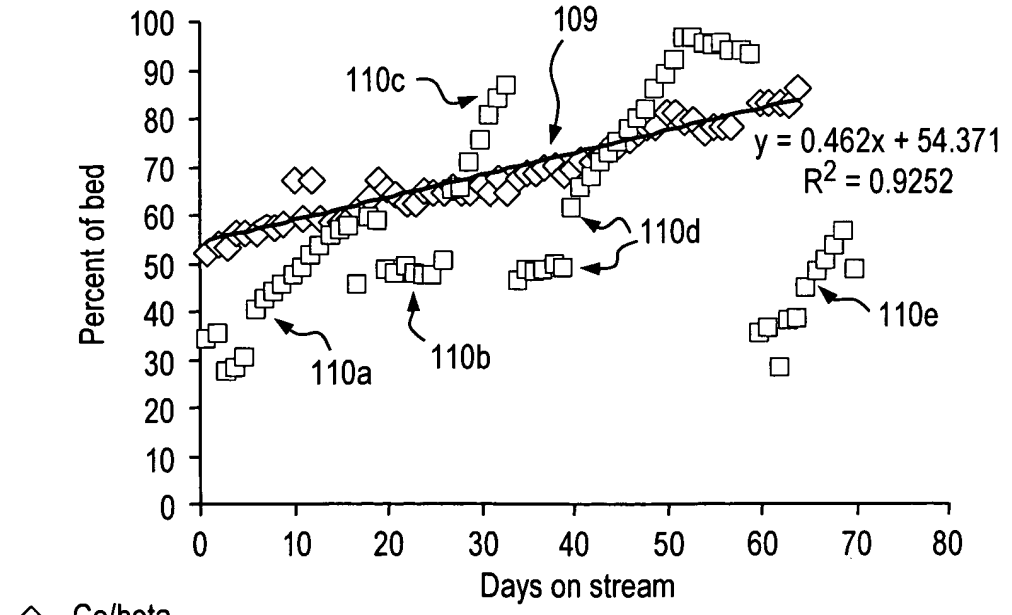
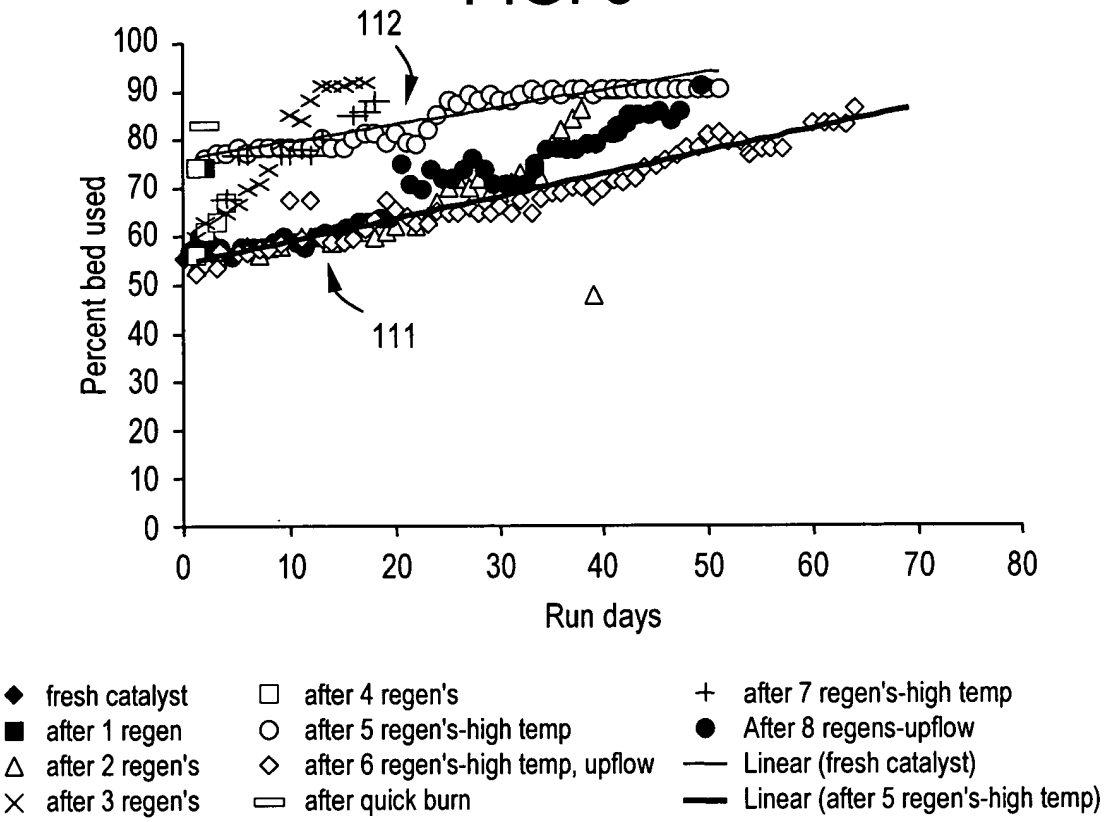
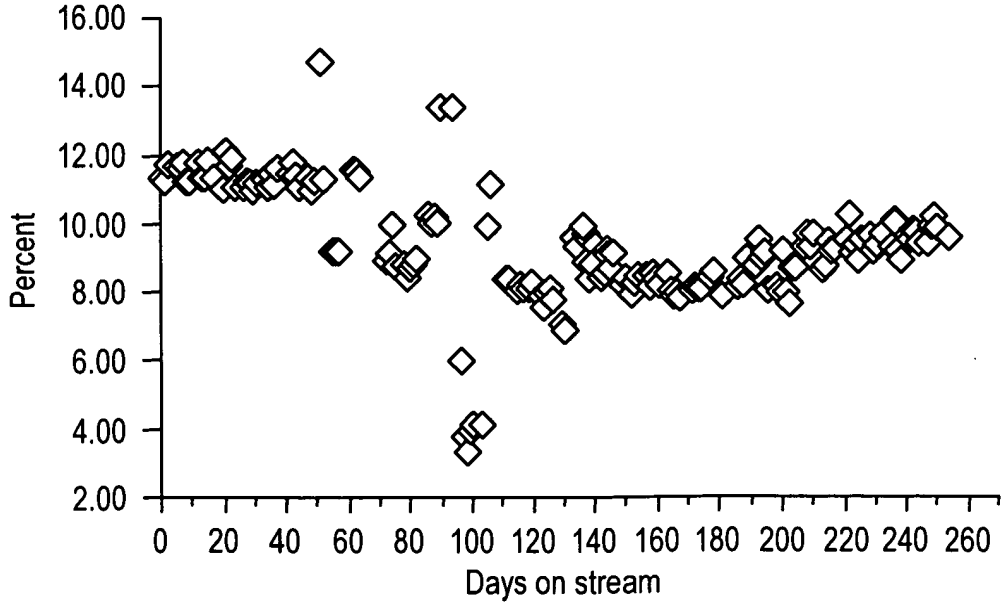

100
90
80
70
60
50
40
30
20
10
0
Percent of bed
0
10
20
30
40
50
60
70
80
Days on stream
109
110c
110d
110e
110a
110b
y = 0.462x + 54.371
R2 = 0.9252
Ce/beta
La/beta
Linear (Ce/beta)

FIG. 6



BEST AVAILABLE COPY

FIG. 7



BEST AVAILABLE COPY

FIG. 8

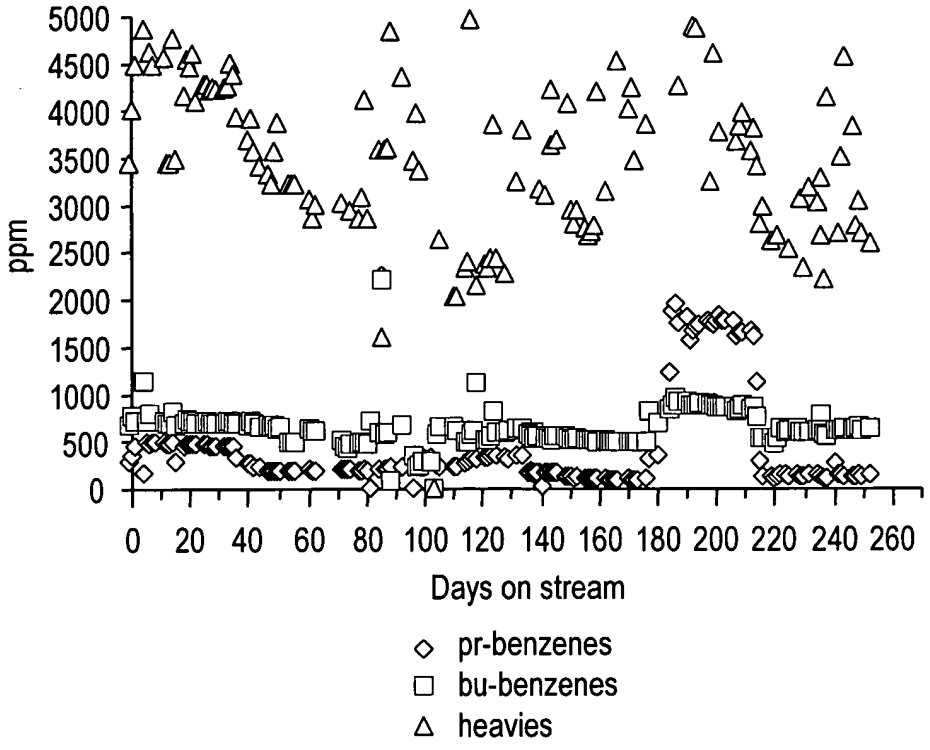


FIG. 9

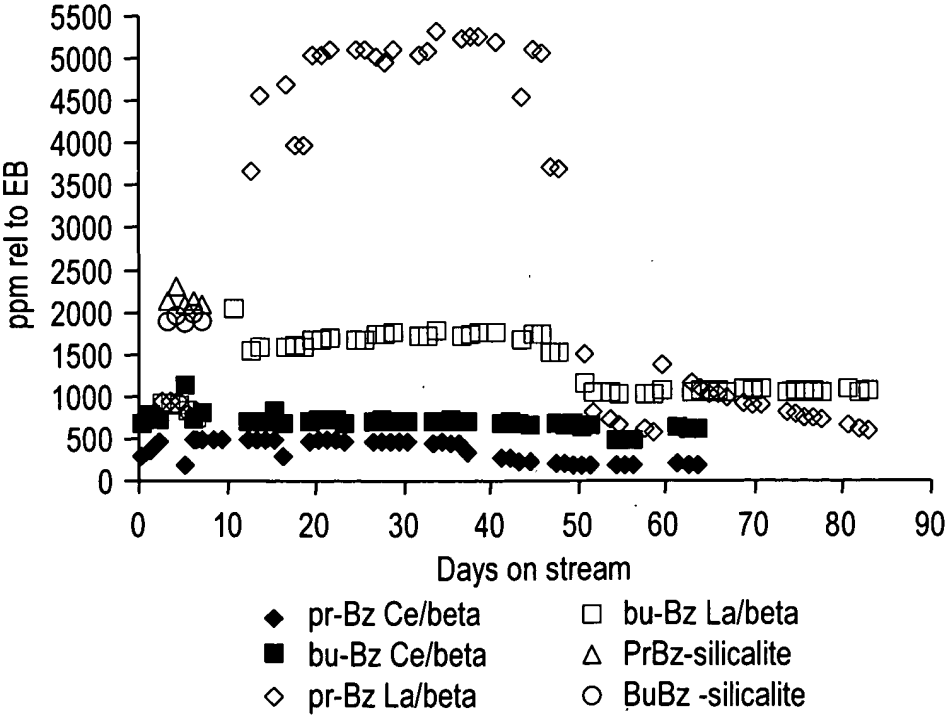


FIG. 10

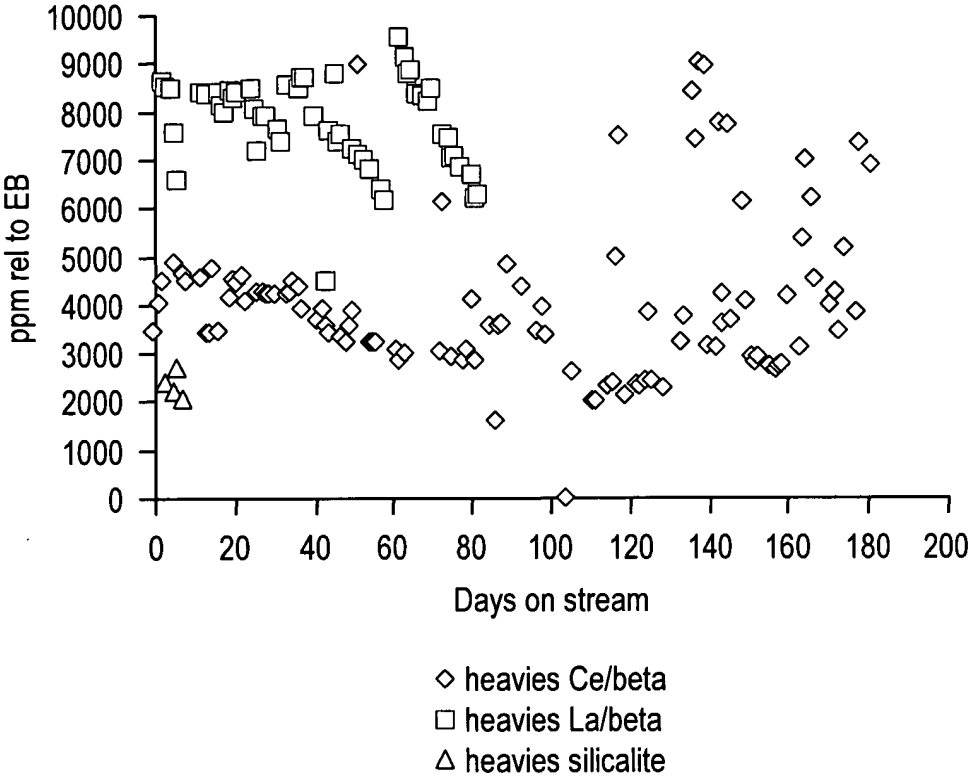
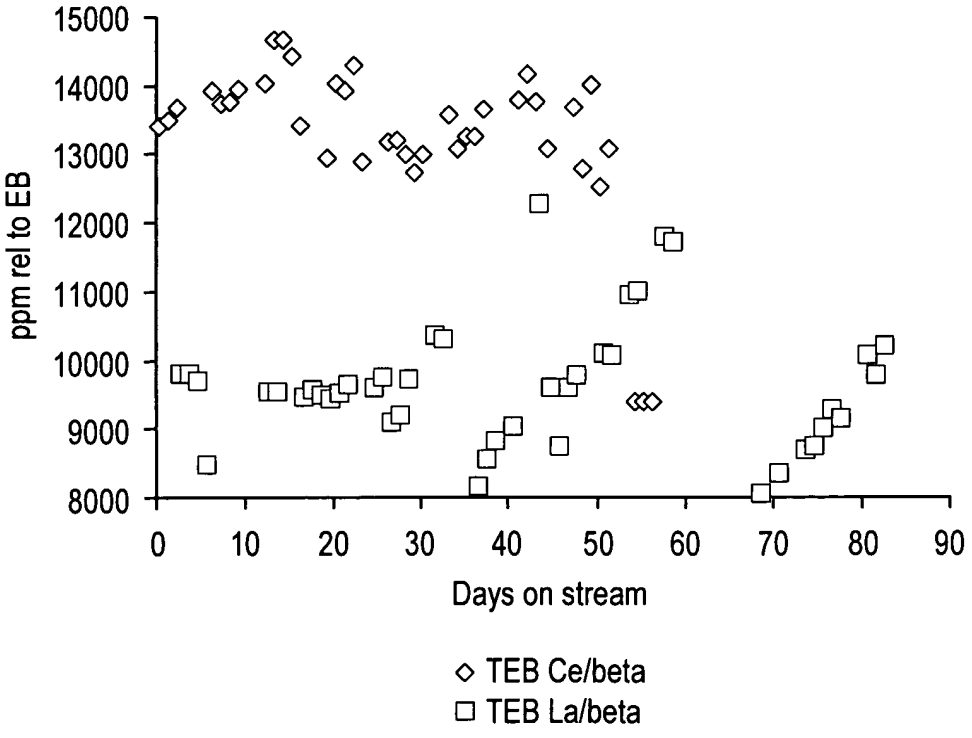

10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
ppm rel to EB
0
20
40
60
80
100
120
140
160
180
200
Days on stream
◇ heavies Ce/beta
□ heavies La/beta
△ heavies silicalite

FIG. 11


15000
14000
13000
12000
11000
10000
9000
8000
ppm rel to EB
0
10
20
30
40
50
60
70
80
90
Days on stream
◇ TEB Ce/beta
□ TEB La/beta